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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,567	08/19/2003	Tongbi Jiang	303.343US8	4912
21,186	7590	02/03/2005	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.			LAMB, BRENDA A	
P.O. BOX 2938			ART UNIT	
MINNEAPOLIS, MN 55402			PAPER NUMBER	

1734

DATE MAILED: 02/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

101643,567

Applicant(s)

Jiang et al

Examiner

LAMB

Group Art Unit

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— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 5/28/2004 and 8/19/2003
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-19 is/are pending in the application.
- Of the above claim(s) 5-7 and 12-19 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-4 and 8-11 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5/28/2004 and 8/19/2003 ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other _____

Office Action Summary

Inventions I -semiconductor die and stencil having a coating applied to at least one top or bottom of the sheet to retard spreading of coating onto the at least one top or bottom surface of the sheet. Inventions II -semiconductor die stencil having a coating applied to at least one top or bottom surface of the sheet to promote spreading onto the at least one top or bottom surface of the sheet are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different function in that stencil of Group I has a coating applied to at least one top or bottom of the sheet to retard spreading of coating onto the at least one top or bottom surface of the sheet but does not require stencil having a coating applied to at least one top or bottom of the sheet to promote spreading of coating onto the at least one top or bottom surface of the sheet as set forth by stencil of Group II. The stencil of Group II has a coating applied to at least one top or bottom of the sheet to promote spreading of coating onto the at least one top or bottom surface of the sheet but does not require the stencil having a coating applied to at least one top or bottom of the sheet to retard spreading of coating onto the at least one top or bottom surface of the sheet as set forth by stencil of Group I.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Attorney Steffey on 12/8/2004 a provisional election was made with traverse to prosecute the invention of Group I , claims 1-4 and

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8-11. Affirmation of this election must be made by applicant in replying to this Office action. Claims 5-7 and 12-19 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-4 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan 59-76868.

Japan '868 teaches a die stencil to assist in application of a printable material in a desired pattern onto a substrate comprising: a sheet of metal material which is impervious to a printable material applied thereto; a plurality of apertures in the sheet of material defining a desired pattern for application of the printable material; and a coating applied to at least one top or one bottom surface of the sheet to retard spreading of the printable material onto the at least one top or one bottom surface of the sheet. Japan '868 is silent as to the obstruction of the flow of printable material through the apertures and thereby reads on the negative limitation that the material flows without obstruction of the flow of printable material through the apertures. Japan '868 teaches the coating is a polymeric material which within the scope of claims 8 and 11, specifically tetrafluoroethylene which is identical to that disclosed applicant at page 9 lines 12-22, and the material of construction of the sheet of material is within scope of that disclosed by applicant at page 9 lines 6-11 and thereby inherently reads on the claimed limitations of the coating and the sheet of metal material (surface tension properties) such as set forth in claims 2-3 and 9-10. Japan '868 is capable of the end use of assisting in the application of a printable material or a printable adhesive material in a desired pattern onto a semiconductor die since it teaches every claimed element of the apparatus/die stencil as set forth in claims 1-4 and 8-11.

Claims 1-4 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Pryor et al.

Pryor et al teaches a die stencil to assist in application of a printable material in a desired pattern onto a substrate comprising: a sheet of aluminum material which is impervious to a printable material applied thereto; a plurality of apertures in the sheet of material defining a desired pattern for application of the printable material; and a coating applied to at least one top or one bottom surface of the sheet to retard spreading of the printable material onto the at least one top or one bottom surface of the sheet. Pryor et al is silent as to the obstruction of the flow of printable material through the apertures and thereby reads negative limitation that the material flows without obstruction of the flow of printable material through the apertures. Pryor et al teaches the coating is a polymeric material which within the scope of claims 8 and 11, specifically tetrafluoroethylene which is identical to that disclosed applicant at page 9 lines 12-22, and the material of construction of the sheet of material is within scope of that disclosed by applicant at page 9 lines 6-11 and thereby inherently reads on the claimed limitations of the coating and the sheet of metal material (surface tension properties) such as set forth in claims 2-3 and 9-10. Pryor et al is capable of the end use of assisting in the application of a printable material or a printable adhesive material in a desired pattern onto a semiconductor die since it teaches every claimed element of the apparatus/die stencil set forth in claims 1-4 and 8-11.

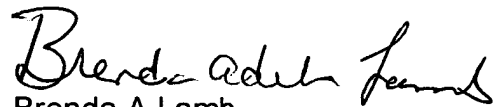
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda A. Lamb whose telephone number is 571-272-

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1231. The examiner can normally be reached on Monday and Wednesday thru Friday with alternate Tuesdays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Fiorilla, can be reached on (571) 272-1231. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Brenda A Lamb
Examiner
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Lamb/tgd

January 18, 2005